

60. An isolated polypeptide comprising a member selected from the group consisting of

- (a) an amino acid sequence matching SEQ ID NO:2 or SEQ ID NO:4;
- (b) an immunogenic polypeptide comprising a fragment sequence of at least 15 amino acids that matches an aligned contiguous segment of SEQ ID NO:2 or SEQ ID NO:4;

Sub C
wherein the isolated polypeptide, when administered to a subject in a suitable composition which can include an adjuvant, or a suitable carrier coupled to the polypeptide, induces an antibody or T-cell immune response to a polypeptide having the sequence of SEQ ID NO:2 or SEQ ID NO:4;

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61. The isolated polypeptide of claim 61, wherein the polypeptide is according to (a).

62. The isolated polypeptide of claim 60, wherein the polypeptide is according to (b).

B
63. The isolated polypeptide of claim 60, wherein the immunogenic fragment of (b) comprises at least 20 amino acids.

Sub D
64. The isolated polypeptide of claim 60, wherein the isolated polypeptide consists of SEQ ID NO:2 or SEQ ID NO:4.

65. A fusion protein comprising the isolated polypeptide of Claim 60.

66. An immunogenic composition comprising the polypeptide of Claim 60 and a pharmaceutically acceptable carrier.

Sub E
67. The immunogenic composition of Claim 66, wherein the vaccine comprises at least one other *Moraxella catarrhalis* antigen.